

II. Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 7, 17 and 19-30 were previously pending, with claims 1-6, 8-16 and 18 having been previously canceled without prejudice or disclaimer.

Claims 7, 17 and 19-30 have been maintained in their previously-presented form.

As a result, claims 7, 17 and 19-30 are pending.

Claims 1-6 (Canceled)

7. (Previously Presented) A method of controlling the flow of fluidic materials within a tubular housing that defines an inlet passage and one or more outlet passages, comprising:
injecting fluidic materials into the inlet passage;
blocking the inlet passage;
conveying the injected fluidic materials radially out of the inlet passage into a plurality of spaced apart longitudinal passages defined in the tubular housing and into an annular chamber defined in the tubular housing that surrounds the inlet passage;
and
opening the outlet passages to permit fluidic materials within the inlet passage and the annular chamber to be conveyed out of the housing.

Claims 8-16 (Canceled)

17. (Original) The method of claim 7, wherein blocking the inlet passage comprises:
blocking the inlet passage by placing a ball plug into a throat passage defined in the inlet passage.

18. (Canceled)

19. (Previously Presented) The method of claim 7, further comprising:
preventing debris from entering the annular chamber.

20. (Original) The method of claim 7, wherein opening the outlet passages comprises:

detecting the operating pressure of the injected fluidic materials; and if the detected operating pressure of the injected fluidic materials exceeds a predetermined amount, then opening the outlet passages.

21. (Previously Presented) The method of claim 20, wherein opening the outlet passages comprises:

if the detected operating pressure of the injected fluidic materials exceeds about 500 to 3,000 psi, then displacing valve members positioned within corresponding longitudinal valve chambers defined in the tubular housing.

22. (Original) The method of claim 7, further comprising:

controlling the rate at which the fluidic materials are conveyed out of the tubular housing through the outlet passages using variable orifices positioned within and fluidically coupled to the outlet passages.

23. (Original) The method of claim 7, wherein the outlet passages are orthogonal to the inlet passage.

24. (Previously Presented) The method of claim 7, further comprising:

conveying the injected fluidic materials into a plurality of circumferentially spaced apart longitudinal valve chambers fluidically coupled to corresponding outlet passages that each include corresponding movable valve members.

25. (Previously Presented) The method of claim 24, wherein opening the outlet passages comprises:

if the detected operating pressure of the injected fluidic materials exceeds a predetermined amount, then displacing the valve members positioned within the corresponding longitudinal valve chambers.

26. (Original) The method of claim 24, wherein the valve chambers are interleaved among the longitudinal passages.

27. (Previously Presented) The method of claim 7, wherein blocking the inlet passage comprises:

blocking the inlet passage by placing a ball plug into a throat passage defined in the inlet passage; and further comprising: preventing debris from entering the annular chamber.

28. (Previously Presented) The method of claim 7, wherein opening the outlet passages comprises:

detecting the operating pressure of the injected fluidic materials; if the detected operating pressure of the injected fluidic materials exceeds about 500 to 3,000 psi, then displacing valve members positioned within corresponding longitudinal valve chambers defined in the tubular housing; and
controlling the rate at which the fluidic materials are conveyed out of the tubular housing through the outlet passages using variable orifices positioned within and fluidically coupled to the outlet passages.

29. (Previously Presented) The method of claim 7, wherein the outlet passages are orthogonal to the inlet passage; and further comprising:

conveying the injected fluidic materials into a plurality of circumferentially spaced apart longitudinal valve chambers fluidically coupled to corresponding outlet passages that each include corresponding movable valve members.

30. (Original) A method for controlling the flow of fluidic materials within a tubular housing defining an inlet passage for conveying the fluidic materials into the housing and one or more outlet passages for conveying fluidic materials out of the housing, comprising:

injecting fluidic materials into the inlet passage;

blocking the inlet passage by placing a ball plug into a throat passage defined in the inlet passage;

conveying the injected fluidic materials radially out of the inlet passage into a plurality of spaced apart longitudinal passages defined in the tubular housing and into an annular chamber defined in the tubular housing and surrounding the inlet passage; preventing debris from entering the annular chamber;

detecting the operating pressure of the injected fluidic materials;
if the detected operating pressure of the injected fluidic materials exceeds about 500 to 3,000 psi, then displacing valve members positioned within corresponding longitudinal valve chambers defined in the tubular housing to thereby permit fluidic materials within the inlet passage to be conveyed radially out of the tubular housing through a plurality of outlet passages; and
controlling the rate at which the fluidic materials are conveyed out of the tubular housing through the outlet passages using variable orifices positioned within and fluidically coupled to the outlet passages.